

**IN THE SPECIFICATION:**

The specification as amended below with replacement paragraphs shows added text with underlining and deleted text with ~~strikethrough~~.

Please REPLACE the two paragraphs beginning at page 8, line 2, with the following two paragraphs:

Referring to Fig. 4, the control unit 330 loads the preset maximum amplitude data (i.e., a first reference value) stored in the first storage unit 341, and presets a maximum amplitude of the piston of the linear compressor 100 at ~~step~~-S10. The preset maximum amplitude data (e.g., the first reference value) is ~~the a~~ maximum value ~~for allowing to allow~~ the piston of the linear compressor 100 to reciprocate without any collision, is preset when the linear compressor 100 is manufactured, and is stored in the first storage unit 341.

After presetting the maximum amplitude of the piston, the control unit 330 controls the compressor driving unit 350 to operate the linear compressor 100 using a typical operating method at ~~step~~-S20. When the linear compressor 100 operates, the control unit 330 detects a signal through the collision detection unit 200 at ~~step~~-S30.

Please REPLACE the two paragraphs beginning at page 10, line 6, with the following two paragraphs:

As described above, after signal detection at ~~step~~ S30, the control unit 330 determines whether the collision of the piston with a valve has occurred at in accordance with the amplitude of the signal detected by the collision detection unit 200 at step-S40. At ~~step~~-S40, if it is determined that the collision has occurred, the control unit 330 resets the preset maximum amplitude of the piston at ~~step~~-S41. In this case, the preset maximum amplitude of the piston is reset by subtracting ~~the a~~ preset maximum amplitude value from ~~the an~~ amplitude value obtained measured when the collision occurs. The control unit 330 stores the reset maximum amplitude data (i.e., a second reference value) in the second storage unit 342.

After resetting the preset maximum amplitude of the piston at step-S41, the control unit 330 determines whether the linear compressor 100 should be stopped in response to an external signal at ~~step-S50~~. If it is determined that the linear compressor 100 should not be stopped in response to the external signal at step-S50, the control unit 330 controls the operation of the linear compressor 100 through the compress driving unit 350, depending on the reset maximum amplitude data (i.e., second reference value) at step-S20. That is, if it is determined that the collision has occurred at S40 after presetting a maximum amplitude of the piston of the linear compressor 100 at S10 based on the preset maximum amplitude data (i.e., the first reference value) and if it is determined that the linear compressor 100 should not be stopped in response to the external signal at S50, then the control unit 330 controls the operation of the linear compressor 100 through the compressor driving unit 350 based on the set maximum amplitude data (i.e., the second reference value) at S20.